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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,553	08/17/2001	James E. Hebert	5160-08	3908

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EXAMINER	
JUNTIMA, NITTAYA	
ART UNIT	**PAPER NUMBER**
2663	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/932,553	HEBERT, JAMES E.	
	Examiner	Art Unit	
	Nittaya Juntima	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/5/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because items 10, 12, and 14 in Fig. 1 require descriptive text labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1-2, 6, 8, 9, and 13 are objected to because of the following informalities:

- in claim 1, ll 4, "I/O" should be spelled out to avoid any misinterpretation;

ll 11, "though" should be changed to "through;"

ll 18, "I/O" should be deleted;

- in claims 2 and 9, "FDDI" should be spelled out to avoid any misinterpretation.
- in claims 6 and 13, "IP" should be spelled out to avoid any misinterpretation;
- in claim 8, ll 3, "I/O" should be spelled out to avoid any misinterpretation;

ll 9,"NIC" should be spelled out to avoid any misinterpretation.

In addition, in claim 1, "configured to" in ll 6 and 10 should be changed to make the limitations positive. **An alternative to the suggested change would be a written confirmation stating that the claimed element performs the actual function following "configured to."** It has been held that the recitation that an element being "configured to" perform a function is *not* a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6 and 8-13 are rejected under 35 U.S.C. 103(a) as being obvious over an admitted prior art (the background of the invention in the specification) in view of Tosey et al. ("Tosey") (USPN 6,392,990 B1).

Regarding claims 1 and 8, an admitted prior art teaches a communication adapter system (communication adapter system, e.g. a private network, page 1, ll 28-30) for connecting a client (a client, page 1, ll 28-30) to a network (the communication network, page 1, ll 28-30), the system comprising:

a server (a server) having a memory (since a software application is running of a server, a memory must be included to store the software application) electrically connected to the client (page 1, ll 28-pge 2, ll 4, and page 3, ll 26-33);

a primary I/O board (a primary I/O board) electrically connected to the server and having a primary network interface card, the primary NIC having an inherent primary I/O port for connecting to the network, the primary NIC enables active transfer of data from the client to the network through the primary I/O port (page 1, ll 28-pge 2, ll 4, and page 3, ll 26-33);

a secondary I/O board (a passive I/O board) electrically connected to the server and having a secondary NIC (a passive NIC), the secondary NIC having an inherent secondary I/O port for connecting to the network, the secondary NIC disables active transfer of data from the client to the network though the secondary I/O port (page 3, ll 33-page 4, ll 2);

a primary switch (a primary switch) electrically connected to the primary I/O port and the network (page 1, ll 28-pge 2, ll 4, and page 3, ll 26-33);

a secondary switch (a passive switch) electrically connected to the secondary I/O port and the network (page 1, ll 28-pge 2, ll 4, and page 3, ll 26-page 4, ll 2); and

program signals (a software application) stored in the memory of the server (page 2, ll 1-2).

The admitted prior art further teaches that program signals defining an executable program for:

generating a connectivity signal (a UNIX system command) to the primary NIC to test connectivity at least from the primary I/O board to the primary NIC (page 4, ll 4-9);

monitoring the primary I/O port to detect a response signal (since the response to the query must be received through the I/O port, page 4, ll 4-9, therefore, monitoring of the the primary I/O must be included);

configuring the primary NIC to disable active transfer of data if connectivity is not detected (page 4, ll 4-9);

configuring the secondary NIC to enable the active transfer of data if connectivity is not detected (failover operation is performed, page 4, ll 4-9).

However, the admitted prior art fails to teach (i) generating the connectivity signal to the primary switch, (ii) monitoring the primary I/O port to detect a response signal a predetermined time period after the generation of the connectivity; and (iii) configuring the primary NIC to disable and the secondary NIC to enable the active transfer of data if the response signal is not detected within the time period as recited in the claim.

In a similar network architecture, as shown in Figs. 2 and 4A, Tosey teaches generating the connectivity signal (a ping) to the primary switch (hub A) to test connectivity at least from the network computing device 21 to the primary switch (col. 4, ll 36-col. 5, ll 3, col. 6, ll 46-65, and col. 7, ll 35-43), monitoring the primary input/output of the primary NIC 25,Fig. 1 to detect a response signal within a predetermined time period (T_2 seconds) after the generation of the connectivity signal (col. 7, ll 44-55), configuring the primary NIC 25 to disable active transfer of

data and configuring the secondary NIC 26,Fig. 1 to enable the active transfer of data if the response signal is not detected within the time period (col. 8, ll 1-4 and 7-21).

Given the teaching of Tosey, it would have been obvious to one skilled in the art to modify the teaching of the admitted prior art to include (i) generating the connectivity signal to the primary switch, (ii) monitoring the primary I/O port to detect a response signal a predetermined time period after the generation of the connectivity; and (iii) configuring the primary NIC to disable and the secondary NIC to enable the active transfer of data if the response signal is not detected within the time period as recited in the claim. The suggestion/motivation to do so would have been to enable the server to recover when other connecting network component fails as taught by Tosey (col. 4, ll 61-67).

Regarding claims 2 and 9, the admitted prior art does not explicitly teach that the network is an FDDI network. However, the admitted prior art teaches that the most common communication adapter system used today is an interface system to an FDDI network (page 1, ll 28-33 and page 3, ll 1-9). Therefore, it would have been obvious to one skilled in the art to modify the teaching of the admitted prior art to include that the network is an FDDI network. The suggestion/motivation to do so would have been to take advantage of the intrinsic redundancies of the FDDI network such that the data transfer with a client would be maintained even if a network device should fail (the admitted prior art, page 3, ll 6-9), and such a change in a field of use involves only routine skill in the art.

Regarding claims 3 and 10, although the admitted prior art teaches generating a connectivity signal to the primary NIC to test connectivity from the primary I/O board to the primary NIC (page 4, ll 4-9), the admitted prior art fails to teach generating a connectivity signal

to a remote device on the network to test connectivity from the primary I/O board through the primary switch and to the remote device.

However, Tosey teaches generating a connectivity signal (a ping) to a remote device (a peer device connected to hub A, i.e. another network computing device, Fig. 2) on the network to test connectivity from the network computing device A, Fig. 1 through the primary switch (hub A, Fig. 2) and to the remote device (a peer device) (col. 4, ll 36-44, col. 6, ll 46-61, col. 7, ll 44-47).

Given the teaching of Tosey, it would have been obvious to one skilled in the art to modify the teaching of the admitted prior art to include generating a connectivity signal to a remote device on the network to test connectivity from the primary I/O board through the primary switch and to the remote device as recited in the claim. The suggestion/motivation to do so would have been to enable the server to recover when other connecting network component fails as taught by Tosey (col. 4, ll 61-67).

Regarding claims 4 and 11, the admitted prior art fails to teach that the connectivity is a ping signal. Tosey teaches that the connectivity is a ping signal (col. 6, ll 46-49 and 56-61). Therefore, it would have been obvious to one skilled in the art to modify the teaching of the admitted prior art to include that the connectivity is a ping signal. The suggestion/motivation to do so would have been to enable the device generating a ping signal, which is the most desirable protocol, to determine whether a destination is reachable (col. 6, ll 56-65).

Regarding claims 5-6 and 12-13, the admitted prior art fails to teach that the program comprises transferring network information including a logical IP address from the primary NIC to the secondary NIC.

However, Tosey teaches that the program (the administrative software, col. 4, ll 52-55) comprises transferring network information including a logical IP address (a mobile IP address) from the primary NIC (NIC 25, Figs. 5A and 5B) to the secondary NIC (NIC 26, Figs. 5A and 5B) (col. 8, ll 7-39).

Given the teaching of Tosey, it would have been obvious to one skilled in the art to modify the teaching of the admitted prior art to include that the program comprises transferring network information including a logical IP address from the primary NIC to the secondary NIC. The suggestion/motivation to do so would have been to enable the recovery process and allow the programs at the application layer to continually send information through the secondary NIC (col. 8, ll 10-21 and 37-39).

5. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being obvious over an admitted prior art (the background of the invention in the specification) in view of Tosey et al. ("Tosey") (USPN 6,392,990 B1), and further in view of Liu et al. ("Liu") (USPN 6,243,838 B1).

Regarding claims 7 and 14, the combined teaching of the admitted prior art and Tosey fails to teach that the program comprises notifying a systems administrator of a failure.

However, Liu teaches notifying a systems administrator of a failure (Abstract, col. 2, ll 20-34 and 50-58).

Therefore, it would have been obvious to one skilled in the art to modify the combined teaching of the admitted prior art and Tosey to include that the program comprises notifying a systems administrator of a failure. The suggestion/motivation to do so would have been to allow the remedial actions to be promptly taken as taught by Liu (col. 2, ll 10-14).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima
March 11, 2005

RICKY NGO
PRIMARY EXAMINER
3/14/05